#### Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

### **Listing of Claims:**

Claim 1. (Currently Amended) A compound of the formula

wherein  $X_1$  is O,  $S(O)_n$ ,  $-\stackrel{\mathbf{R}^5}{\mathbf{N}}$ ,  $\stackrel{\mathbf{R}^5}{\mathbf{CO}-\mathbf{N}}$ , or -CH<sub>2</sub>-, with the proviso that when  $X_1$  is -CH<sub>2</sub>-, [[R<sub>1</sub>]]  $\underline{R}^1$  and [[R<sub>2</sub>]]  $\underline{R}^2$  are only halogen[[.]];

n is 0, 1 or 2;

 $R^a$  and  $R^b$  when taken together form an oxo (=0) group, or  $R^a$  and  $R^b$  are each independently hydrogen, OH, OCOR<sup>9</sup>, NH<sub>2</sub>, N<sub>3</sub>, NHCOOR<sup>9</sup>, NHCOCOR<sup>9</sup>, NHSO<sub>2</sub>R<sup>9</sup> or F;

X is H, CF3, OCF3, halogen,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, C(O)NR<sup>6</sup>R<sup>7</sup> or and heterocyclic;

 $R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkynyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl or and heteroaryl being optionally substituted with one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  or and heterocyclic;

 $R^3$ ,  $R^4$  and Y are each independently H, halogen,  $OR^{10}$ ,  $S(O)_nR^{10}$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl of and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl of and heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  of and heterocyclic, with the proviso that not all of  $R^3$ ,  $R^4$  and Y may be the same halogen;

R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently H, C<sub>1</sub>–C<sub>7</sub> alkyl, C<sub>2</sub>–C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>–C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl of and cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, OR<sup>8</sup>, NR<sup>8</sup>R<sup>9</sup>, SO<sub>3</sub>R<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup>, halogen, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup> of and heterocyclic;

R<sup>8</sup> is H, C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

R<sup>9</sup> is same as R<sup>8</sup> but is not hydrogen C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

R<sup>10</sup> is C<sub>1</sub>–C<sub>7</sub> alkyl, C<sub>2</sub>–C<sub>7</sub> alkenyl, C<sub>2</sub>–C<sub>7</sub> alkynyl, <u>aryl</u> or C<sub>3</sub>–C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, <u>aryl</u> or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup>, C(O)NR<sup>6</sup>R<sup>7</sup> or and heterocyclic;

 $Z \text{ is } OR^{11}, S(O)_n R^{11}, NR^{11}R^{12} \text{ or } CHR^{11}R^{12};$ 

 $R^{11}$  and  $R^{12}$  are each independently hydrogen, is  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ , with the proviso that both  $R^{11}$  and  $R^{12}$  may not be hydrogen;

 $R^{12}$  is hydrogen,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ ;

R<sup>13</sup> and R<sup>14</sup> are each independently H, is SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, Si R<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, OR<sup>15</sup>, aryl, biaryl of and heteroaryl, said aryl, biaryl of and heteroaryl being optionally substituted with one to three groups independently selected from halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, of and CN;

 $R^{14}$  is H, SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl, aryl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally

substituted by one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, Si R<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, OR<sup>15</sup>, aryl, biaryl and heteroaryl, said aryl, biaryl and heteroaryl being optionally substituted with one to three groups independently selected from halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, and CN; or

 $R^{13}$  and  $R^{14}$  when taken together <u>with the nitrogen atom to which they are attached</u> may form a 5–7 membered heterocyclic ring with one or more heteroatoms selected from O, N and S; said ring being optionally substituted by  $OR^8$ ,  $COOR^8$ , or  $C(O)NR^5R^6$ ; and

 $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  are each independently  $\underline{C_1}$ - $\underline{C_7}$  alkyl, aryl, benzyl, benzhydryl, biaryl, heteroaryl,  $(C_1$ - $C_6)$  alkyl-aryl or  $(C_1$ - $C_6)$  alkyl-heteroaryl, said aryl, benzyl, benzhydryl, and biaryl radical being optionally substituted by halogen,  $CF_3$ ,  $OR^8$ ,  $COOR^8$ ,  $NO_2$ , CN, or  $C_1$ - $C_7$  alkyl.

Claim 2. (Currently Amended) A compound of the formula

or a pharmaceutically acceptable salt thereof wherein

 $X_1$  is O, S(O)<sub>n</sub>,  $-\stackrel{R^5}{N}$ ,  $\stackrel{R^5}{CO-N}$  or -CH<sub>2</sub>-, with the proviso that when  $X_1$  is -CH<sub>2</sub>-, [[R<sub>1</sub>]]  $\underline{R}^1$  and [[R<sub>2</sub>]]  $\underline{R}^2$  are only halogen[[.]];

n is 0, 1 or 2;

R<sup>a</sup> and R<sup>b</sup> when taken together form an oxo (=O) group, or R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen, OH, OCOR<sup>9</sup>, NH<sub>2</sub>, N<sub>3</sub>, NHCOOR<sup>9</sup>, NHCOCOR<sup>9</sup>,

 $NHSO_2R^9$  or F[[.]];

X is H, CF3, OCF3, halogen,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, C(O)NR<sup>6</sup>R<sup>7</sup> of and heterocyclic;

 $R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl alkynyl,  $C_2$ – $C_7$  alkenyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl of and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl of and heteroaryl being optionally substituted with one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  of and heterocyclic;

 $R^3$ ,  $R^4$  and Y are each independently H,  $OR^{10}$ ,  $S(O)_nR^{10}$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl of and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl of and heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  of and heterocyclic;

 $R^5$ ,  $R^6$  and  $R^7$  are each independently H,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ - $C_7$ 

alkynyl or C<sub>3</sub>–C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl of and cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, OR<sup>8</sup>, NR<sup>8</sup>R<sup>9</sup>, SO<sub>3</sub>R<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup>, halogen, aryl or heteroaryl, said aryl of and heteroaryl being optionally substituted by one or two groups independently selected from COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup> of and heterocyclic;

R<sup>8</sup> is H, C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl, CF<sub>3</sub> or CH<sub>2</sub>CF<sub>3</sub>;

 $R^9$  is same as  $R^8$  but is not hydrogen  $C_1$ – $C_7$  saturated straight chain alkyl or cycloalkyl;

 $R^{10}$  is  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl, aryl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  or and heterocyclic;

Z is OR<sup>11</sup>, S(O)<sub>n</sub>R<sup>11</sup>, NR<sup>11</sup>R<sup>12</sup> or CHR<sup>11</sup>R<sup>12</sup>;

 $R^{11}$  and  $R^{12}$  are each independently hydrogen, is  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ , with the proviso that both  $R^{11}$  and  $R^{12}$  may not be hydrogen;

R<sup>12</sup> is hydrogen,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by NR<sup>13</sup>R<sup>14</sup>, S(O)<sub>n</sub>R<sup>13</sup> or OR<sup>13</sup>;

 $R^{13}$  and  $R^{14}$ -are each independently H, is  $SiR^{15}R^{16}R^{17}$ ,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkynyl, aryl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by one to three groups independently selected from  $COOR^8$ ,  $OR^8$ ,  $Si~R^{15}R^{16}R^{17}$ ,  $OR^{15}$ , aryl, biaryl of and heteroaryl, said aryl, biaryl of and heteroaryl being optionally substituted with one to three groups independently selected from halogen,  $CF_3$ ,  $OR^8$ ,  $COOR^8$ ,  $NO_2$ , of and CN;

R<sup>14</sup> is H, SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, C<sub>1</sub>–C<sub>7</sub> alkyl, C<sub>2</sub>–C<sub>7</sub> alkenyl, C<sub>2</sub>–C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>–C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, Si R<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, OR<sup>15</sup>, aryl, biaryl and heteroaryl, said aryl, biaryl and heteroaryl being optionally substituted with one to three groups independently selected from halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, and CN; or

 $R^{13}$  and  $R^{14}$  when taken together with the nitrogen atom to which they are attached may form a 5 – 7 membered heterocyclic ring with one or more heteroatoms selected from O, N and S; said ring being optionally substituted by  $OR^8$ ,  $COOR^8$ , or  $C(O)NR^5R^6$ ; and

 $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  are each independently  $\underline{C_1}$ - $\underline{C_7}$  alkyl, aryl, benzyl, benzhydryl, biaryl, heteroaryl, ( $C_1$ - $C_6$ ) alkyl-aryl or ( $C_1$ - $C_6$ ) alkyl-heteroaryl, said aryl, benzyl, benzhydryl, and biaryl radical being optionally substituted by halogen,  $CF_3$ ,  $OR^8$ ,  $COOR^8$ ,  $NO_2$ , CN, or  $C_1$ - $C_7$  alkyl.

Claim 3. (Currently Amended) A compound of claim 2 wherein  $X_1$  is O[[,]] or  $S(O)_n$  and Y is  $OR^{10}$  in which  $R^{10}$  is  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl, aryl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,

OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, C(O)NR<sup>6</sup>R<sup>7</sup> or heterocyclic, said R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> substituents being defined as in claim 2.

Claim 4. (Original) A compound of claim 3 in which  $R^a$  and  $R^b$  taken together represent an oxo (=0) group, or  $R^a$  and  $R^b$  are each independently hydrogen or OH.

Claims 5-6. (Canceled).

Claim 7. (Currently Amended) A compound of claim 3, 4, 5 or 6 in which

Zis

in which m and p each independently represent an integer of one to six,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  are each independently  $C_1$ – $C_7$  alkyl or phenyl,  $R^{18}$  is  $C_1$ – $C_7$  alkyl and aryl

represents X' in which  $X^1$  is halogen.

Claim 8. (Canceled).

Claim 9. (Original) A pharmaceutical composition for the inhibition of cytosolic phospholipase A<sub>2</sub> comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

Claim 10. (Withdrawn) A method of inhibiting cytosolic phospholipase A<sub>2</sub> in a mammal in need thereof, comprising administering to said mammal a therapeutically effective amount of a compound of claim 1.

# Claim 11. (New) A compound selected from

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or a pharmaceutically acceptable salt thereof.

## Claim 12. (New) A compound of the formula

$$Z \xrightarrow{R^1 \quad R^2} X_1 \xrightarrow{R^3 \quad R^4} X_1 \xrightarrow{R^4 \quad R^5 \quad R^4} X_2 \xrightarrow{R^4 \quad R^5 \quad R^4} X_3 \xrightarrow{R^4 \quad R^5 \quad R^4} X_4 \xrightarrow{R^5 \quad R^5 \quad R^4} X_4 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^4} X_4 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^5} X_4 \xrightarrow{R^5 \quad R^5 \quad R^5} X_4 \xrightarrow{R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R^5 \quad R^5 \quad R^5 \quad R^5 \xrightarrow{R^5 \quad R^5 \quad R^5} X_5 \xrightarrow{R^5 \quad R^5 \quad R$$

or a pharmaceutically acceptable salt thereof wherein

 $X_1$  is O, S(O)<sub>n</sub>, CO-N-, or  $-CH_2-$ , with the proviso that when  $X_1$  is  $-CH_2-$ ,  $R^1$  and  $R^2$  are only halogen;

n is 0, 1 or 2;

R<sup>a</sup> and R<sup>b</sup> when taken together form an oxo (=O) group, or R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen, OH, OCOR<sup>9</sup>, NH<sub>2</sub>, N<sub>3</sub>, NHCOCOR<sup>9</sup>, or F;

X is H;

R<sup>1</sup> and R<sup>2</sup> are each independently H, halogen, OR<sup>9</sup>, or C<sub>1</sub>-C<sub>7</sub> alkyl;

 $R^3$ ,  $R^4$  and Y are each independently H, halogen,  $OR^{10}$ , or  $C_1$ - $C_7$  alkyl, said alkyl being optionally substituted by aryl, said aryl being optionally substituted by one or two  $COOR^8$  groups, with the proviso that not all of  $R^3$ ,  $R^4$  and Y may be the same halogen;

R<sup>5</sup>, R<sup>6</sup>, and R<sup>7</sup> are each independently hydrogen or C<sub>1</sub>-C<sub>7</sub> alkyl, said alkyl being optionally substituted by OR<sup>8</sup>;

R<sup>8</sup> is H or C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl;

R<sup>9</sup> is C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl;

 $R^{10}$  is  $C_1$ - $C_7$  alkyl or aryl, said alkyl or aryl group being optionally substituted by  $COOR^8$ ,  $C(O)NR^6R^7$ , heterocyclic, or  $OR^8$ ;

Z is OR<sup>11</sup> or CHR<sup>11</sup>R<sup>12</sup>;

 $R^{11}$  is  $C_1$ - $C_7$  alkyl substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ ;

R<sup>12</sup> is hydrogen;

R<sup>13</sup> is SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup> or C<sub>1</sub>-C<sub>7</sub> alkyl, said alkyl substituted by one to three groups independently selected from OR<sup>15</sup> and aryl, said aryl substituted with one halogen;

R<sup>14</sup> is C<sub>1</sub>-C<sub>7</sub> alkyl; and

 $R^{15}$ ,  $R^{16}$ , and  $R^{17}$  are each independently  $C_1$ - $C_7$  alkyl, aryl, or benzhydryl, said aryl and benzhydryl being optionally substituted by halogen.

### Claim 13. (New) A compound of the formula

$$Z \xrightarrow{X_1 \times R^a \times R^b} Y$$

$$X \times R^1 \times R^2 \times R^3 \times R^4$$

or a pharmaceutically acceptable salt thereof wherein

 $X_1$  is O,  $S(O)_n$ , or  $-CH_2$ -, with the proviso that when  $X_1$  is  $-CH_2$ -,  $R^1$  and  $R^2$  are only halogen;

n is 0, 1 or 2;

 $R^a$  and  $R^b$  are each independently hydrogen, OH, OCOR $^9$ , NH $_2$ , N $_3$ , NHCOOR $^9$ , NHCOCOR $^9$ , or F;

X is H, CF3, OCF3, halogen,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, C(O)NR<sup>6</sup>R<sup>7</sup> and heterocyclic;

 $R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkynyl,  $C_2$ – $C_7$  alkenyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl and heteroaryl being optionally substituted with one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  and heterocyclic;

 $R^3$  and  $R^4$  are each independently H, halogen,  $OR^{10}$ ,  $S(O)_nR^{10}$ ,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , aryl or heteroaryl, said aryl and heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  and heterocyclic, with the proviso that not all of  $R^3$ ,  $R^4$  and Y may be the same halogen;

Y is  $OR^{10}$  or  $S(O)_nR^{10}$ ;

 $R^5$ ,  $R^6$  and  $R^7$  are each independently H,  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $OR^8$ ,  $NR^8R^9$ ,  $SO_3R^8$ ,  $PO_3R^8$ , halogen, aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from  $COOR^8$ ,  $SO_3R^8$ ,  $PO_3R^8$  and heterocyclic;

R<sup>8</sup> is H, C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

R<sup>9</sup> is C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

 $R^{10}$  is  $C_1$ – $C_7$  alkyl,  $C_2$ – $C_7$  alkenyl,  $C_2$ – $C_7$  alkynyl, aryl or  $C_3$ – $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ ,  $C(O)NR^6R^7$  or heterocyclic; and

Z is

$$-(CH_2)_m$$
  $-O-S_i$   $-R^{15}$  or  $-(CH_2)_m$   $-N-(CH_2)_p$   $-CH_2$  aryles aryles  $-(CH_2)_m$   $-N-(CH_2)_p$   $-CH_2$  aryles  $-(CH_2)_m$   $-(CH_2)_m$   $-(CH_2)_p$   $-$ 

in which m and p each independently represent an integer of one to six,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  are each independently  $C_1$ – $C_7$  alkyl or phenyl,  $R^{18}$  is  $C_1$ – $C_7$  alkyl and aryl

represents in which 
$$X^1$$
 is halogen.